

# Squamata, Dipsadidae, *Boiruna sertaneja* Zaher, 1996: New records and geographic distribution map

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**ABSTRACT:** We provide a review of the geographic range of *Boiruna sertaneja* and include a new record for the state of Alagoas, Brazil, 96 km east of the first record for this state.

Snakes of the genus *Boiruna* comprise two known species: *Boiruna maculata* (Boulenger, 1896) and *Boiruna sertaneja* Zaher, 1996. They are known as “mussuranas”; they exhibit opisthognath dentition, and are ophiophages, commonly feeding on large venomous snakes such as those of the genera *Bothrops* and *Caudisona* (Scott Jr. *et al.* 2006).

The species differ by the presence of thorn-like spines on the hemipenis of *B. maculata* (absent in *B. sertaneja*) and by the number of subcaudal scales (68-79 in males and 60-75 in females of *B. sertaneja*; 60-73 and 50-63 in *B. maculata*). Furthermore, the color pattern of young *B. sertaneja* is lost sooner than in *B. maculata* (Zaher 1996).

While *B. maculata* is widely distributed in southern and southeastern Brazil, as well as in Bolivia, Argentina, Paraguay, and Uruguay (Uetz and Hallermann 2011), *B. sertaneja* is restricted to open formations of the Caatinga in northeastern Brazil, and in Minas Gerais state (Zaher 1996).

The holotype of *B. sertaneja* was collected at Barreiras, Bahia state (12°09'10" S, 44°59'24" W), but the other specimens used in its description scattered in most northeastern states, but not in Sergipe and Rio Grande do Norte (Zaher 1996). This author reported that the species occurs in Alagoas state, based on two specimens found in Xingó, municipality of Piranhas (09°37'25" S, 37°45'24" W), situated in the highland region, on the border of Sergipe and Bahia states. Additional individuals were recorded from Chapada Diamantina (Juncá *et al.* 2005); Crateus-CE (Borges-Nojosa and Cascon 2005); Parque Estadual do Jalapão-TO (Vitt *et al.* 2005); São José da Mata-PB (Barbosa *et al.* 2007); Sento-Sé-BA (Santos *et al.* 2008); Serra da Jiboia-BA (Fita *et al.* 2010); Planalto de Ibiapaba-CE (Loebmann and Haddad 2010) (Table 1).

We report a new record of *B. sertaneja* in Alagoas (Figure 1), based on two specimens collected near an Atlantic Forest enclave in the Caatinga, at Serra da Mão, in the municipality of Traipu (09°58'14"S, 37°00'12"W,

elevation 373m), located 902 km northeast of the type locality and 96 km east from the nearest record for this species in Alagoas (Zaher 1996) (Figure 2). The specimens were collected under license number 28997-1 of the Chico Mendes Institute for Biodiversity Conservation (ICMBIO) and deposited at the Herpetological Collection of the Museu de História Natural da Universidade Federal do Alagoas (MUFAL), numbers MUFAL 9171 and 9774.

The two specimens are males of SVL 159 and 67 mm with forked hemipenes bearing no spines, ventral scales 223-226, subcaudals 73, with up to 17 single and the rest divided; midbody scale rows 19-19-17, supralabials seven and infralabials eight, conforming to the diagnosis made by Zaher (1996).

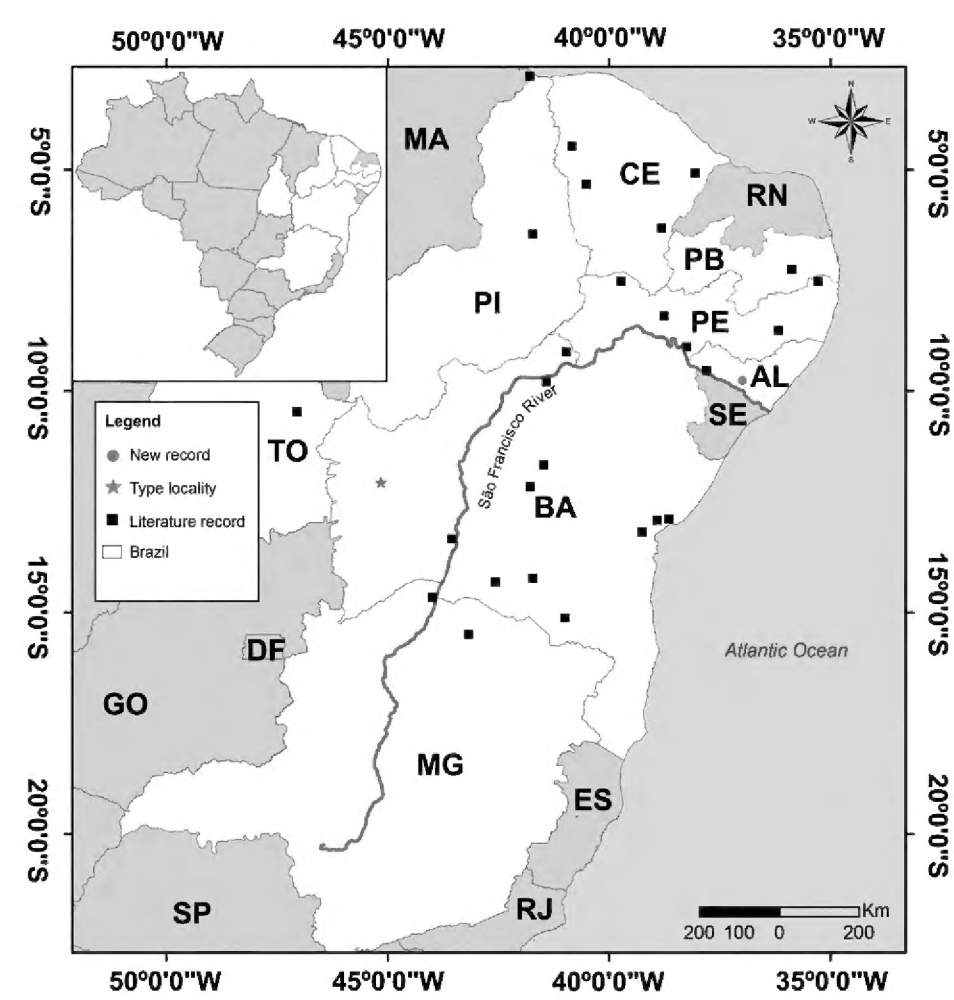
This new location corroborates earlier observations made by Zaher (1996), who suggested that the habitat of this species consists of xeric formations in the lowlands of northeast Brazil.



**FIGURE 1.** *Boiruna sertaneja* from Serra da Mão, Municipality of Traipu (MUFAL 9171, male, SVL 159 mm). Photo by Ubiratan Gonçalves.

**TABLE 1.** Localities and references of *Boiruna sertaneja* distribution records.

LOCALITY/MUNICIPALITY	STATE	LATITUDE (S)	LONGITUDE (W)	REFERENCE
Xingó	Alagoas	08°36'36"	37°46'36"	Zaher (1996)
Serra da Mão/Traipu	Alagoas	09°58'14"	37°00'12"	Present record
Baixa Grande	Bahia	11°57'18"	40°09'58"	Zaher (1996)
Barreiras	Bahia	12°08'51"	44°59'42"	Zaher (1996)
Bom Jesus da Lapa	Bahia	13°15'16"	43°25'07"	Zaher (1996)
Brumado	Bahia	14°11'49"	41°40'09"	Zaher (1996)
Chapada Diamantina	Bahia	11°52'34"	42°10'25"	Juncá <i>et al</i> (2005)
Caetité	Bahia	14°03'53"	42°29'10"	Zaher (1996)
Conquista	Bahia	11°49'00"	41°31'00"	Zaher (1996)
Itaparica	Bahia	12°55'02"	38°39'16"	Zaher (1996)
Muritiba	Bahia	12°38'12"	39°05'45"	Zaher (1996)
Serra da Jibóia	Bahia	12°51'00"	39°28'45"	Fita <i>et al.</i> (2010)
Sento-Sé	Bahia	09°44'26"	41°52'48"	Santos <i>et al.</i> (2008)
Icó	Ceará	06°24'07"	38°51'18"	Zaher H. (1996)
Limoeiro do Norte	Ceará	05°08'56"	38°05'51"	Zaher H. (1996)
Planalto da Ibiapaba	Ceará	03°20'05"	40°42'41"	Loebmann and Haddad (2010)
Crateús	Ceará	05°10'33"	40°40'04"	Borges-Nojosa and Cascon (2005)
Parque Estadual do Jalapão	Tocantins	10°27'15"	46°46'17"	Vitt <i>et al.</i> (2005)
Campina Grande	Paraíba	07°13'50"	35°52'54"	Zaher (1996)
Distrito de São José de Mata/ Campina Grande	Paraíba	07°13'00"	35°55'00"	Barbosa <i>et al.</i> (2007)
Carnaubeira	Pernambuco	08°18'45"	38°44'22"	Zaher (1996)
Exu	Pernambuco	07°30'49"	39°42'33"	Zaher (1996)
Timbaúba	Pernambuco	07°30'11"	35°18'50"	Zaher (1996)
Petrolândia	Pernambuco	09°04'11"	38°16'54"	Zaher (1996)
Manga	Minas Gerais	14°45'24"	43°56'31"	Zaher (1996)



**FIGURE 2.** Geographic distribution of *Boiruna sertaneja*. Black squares: data from literature; red star: type locality; red circle: new record. MG: Minas Gerais; BA: Bahia; AL: Alagoas; PE: Pernambuco; PB: Paraíba; RN: Rio Grande do Norte; CE: Ceará; PI: Piauí.

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**LITERATURE CITED**

Barbosa, A. R., N.A. Kioharu, E.S. Costa and A.L.R. Cazé. 2007. Abordagem etnoherpetológica de São José da Mata – Paraíba – Brasil. *Revista de Biologia e Ciências da Terra* 7(2): 117-123.

Borges-Nojosa, D.M.P. and P. Cascon. 2005. Herpetofauna da Área Reserva da Serra das Almas, Ceará. p. 245-260 *In* F.S. Araújo, M.J.N. Rodal and M.R.V. Barbosa (ed.). *Análise das Variações da Biodiversidade do Bioma Caatinga*. Volume I. Brasília: Ministério do Meio Ambiente.

Fita, D. S., E.M.C. Neto and A. Schiavetti. 2010. 'Offensive' snakes: cultural beliefs and practices related to snakebites in a Brazilian rural settlement. *Journal of Ethnobiology and Ethnomedicine* 6(1):1-13

Juncá, F.A., L. Funch, and W. Rocha. 2005. *Biodiversidade e Conservação da Chapada Diamantina*. Brasília: Ministério do Meio Ambiente. 411 p.

Loebmann, D. and C.F.B. Haddad. 2010. Amphibians and reptiles from a highly diverse area of the Caatinga domain: composition and conservation implications. *Biota Neotropica* 10(3): 227-255.

Santos, F.J.M., A.P. Peña, and V.L.F. Luz. 2008. Considerações biogeográficas sobre a herpetofauna do submédio e da foz do Rio São Francisco, Brasil. *Estudos* 35(1/2): 59-78.

Scott N.J., A. R. Giraudo, G. Scrocchi, A. L. Aquino., P. Cacciali and M. Motte. 2006. The genera *Boiruna* and *Clelia* (Serpentes: Pseudoboini) in Paraguay and Argentina. *Papéis Avulsos de Zoologia* 46(9): 77-105.

Uetz, P., J. Goll, and J. Hallermann. 2011 *The Reptile Database. Version 2011.9*. Electronic Database accessible at <http://www.reptile-database.org/>. Captured on 14 November 2011.

Vitt, L.J., J.P. Caldwell, G.R. Colli, A.A. Garda, D.O. Mesquita, F.G.R. França, D.B. Shepard, G.C. Costa, M.M. Vasconcellos and V.N. Silva. 2005. Uma Atualização do Guia Fotográfico dos Répteis e Anfíbios da Região do Jalapão no Cerrado Brasileiro. *Special Publications in Herpetology Sam Noble Oklahoma Museum of Natural History* 2: 1-24.

Zaher, H. 1996. A new genus and species of pseudoboine snake, with a revision of the genus *Clelia* (Serpentes, Xenodontinae). *Bollettino del Museo Regionale di Scienze Naturali* 14(2): 289-337.

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